

## Storm Data and Unusual Weather Phenomena - December 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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### WISCONSIN, Southeast

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z060) OZAUCKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA

12/08/09 14:00 CST	0	Winter Storm
12/09/09 15:00 CST	0	

This winter storm was the first, widespread storm to affect south-central and Southeast Wisconsin during the 2009-10 winter season. Low pressure strengthened as it moved northeast from the Oklahoma Panhandle across Missouri and western Illinois on Tuesday December 8th, then across northern Illinois and southern Lake Michigan to northern Lower Michigan on Wednesday December 9th. This is a favorable track for heavy snow for southern Wisconsin. Observers recorded widespread 12-inch snow totals, with local 16 to 20 inch amounts. The maximum storm total snowfall reported was 20.2 inches near Mc Farland in Dane County (CoCoRaHS). Snowfall amounts were reduced to between 2 and 6 inches along the Lake Michigan shoreline as a combination of warm air drawn northward ahead of the low and warmer air over the lake turned the precipitation over to rain for a time. Additionally, rapid deepening of the low (a 15-mb fall in less than 12 hours) generated sustained winds of 17 to 26 knots (20 to 30 mph) and occasional gusts of 30 to 37 knots (35 to 43 mph) out of the northeast. This resulted in occasional near-whiteout conditions in open areas due to blowing and drifting snow. The somewhat moist snow and the winds combined to knock down trees and power-lines. At the height of the storm, 32,000 customers in the Madison area and 50,000 customers in the metropolitan Milwaukee area were without electrical power.

Maximum snow amounts in each county include an estimated 16" in northwest Marquette County, 13.8" in Berlin (Green Lake Co.), 13" in Ashford (Fond du Lac Co.), 13" in Elkhart Lake (Sheboygan Co.), 16.6" in Reedsburg (Sauk Co.), 16.5" near Doylestown (Columbia Co.), an estimated 15 inches in far western Dodge County, 16" in West Bend (Washington Co.), an estimated 12" in far northwestern Ozaukee County, an estimated 14" in far southeastern Iowa County, 20.5" near McFarland (Dane Co.), 14" in Waterloo (Jefferson Co.), an estimated 10.5" in far southwestern Waukesha County, an estimated 6.5" in far southeastern Milwaukee County, 14" in northern Lafayette County, an estimated 18" in northeastern Green County and northwestern Rock Counties, an estimated 10.5" in far north-central Walworth County, an estimated 9" in far northwestern Racine County, and 5" in far western Kenosha County.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z072) KENOSHA

12/23/09 14:00 CST	0	Winter Weather
12/24/09 07:00 CST	0	

The area from Marquette County east to Sheboygan experienced snow accumulations ranging from 1.5 inches near Lake Michigan to 3 inches in Green Lake County. Near the end of this event, a glazing of freezing rain occurred with ice accumulations of less than 1/10 of an inch. This combination resulted in Interstate 43 in Sheboygan County being closed for 3 hours during the morning of December 24th due to vehicle accidents.

Just south of this winter weather event, winter storm conditions were experienced. A band of moderate, to at times heavy, snow extended from near Milwaukee, to just north of Madison to the Wisconsin Dells area, producing 4 to 6 inches of accumulation before changing over to sleet and freezing rain overnight. Counties along the Illinois border saw snow quickly turn over to freezing rain Wednesday afternoon that resulted in an ice storm. Ice accumulations of 1/4 to 1/2 inch coated trees and power lines, causing them to break. Synoptically, warm air advection with a short wave aloft followed by a surface low pressure lifting northward from the southern Plains brought a mix of snow, sleet and freezing rain to Southern Wisconsin the afternoon of Wednesday, December 23rd into the morning of Thursday, December 24th.

(WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH

12/23/09 16:00 CST	0	Ice Storm
12/24/09 04:00 CST	0	

Counties along the Illinois border saw snow quickly turn over to freezing rain during the December 23rd afternoon hours which resulted in a low-end ice storm. Ice accumulations of 1/4 to 1/2 inch coated trees and power lines causing them to break. Many roads became very slippery, and dozens of vehicle accidents were reported. North of this ice storm area, winter storm conditions were experienced. A band of moderate, to at times heavy, snow extended from near Milwaukee to just north of Madison to the Wisconsin Dells area, producing 2 to 6 inches of snow before changing over to sleet and freezing rain overnight. Synoptically, warm air advection with a short wave aloft followed by a surface low pressure lifting northward from the southern Plains brought a mix of snow...sleet and freezing rain to southern Wisconsin the afternoon of Wednesday, December 23rd into the morning of Thursday, December 24th.

(WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUCKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z071) RACINE

12/23/09 17:00 CST	0	Winter Storm
12/24/09 06:00 CST	0	

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Winter Storm conditions were experienced in the Baraboo to Madison to Milwaukee corridor from the evening hours of Dec 23rd into the early morning hours of Dec 24th. This storm had a major impact on Holiday shoppers and travelers due to slippery roads and poor visibilities. Generally, a band of moderate, to at times heavy snow, extended from near Milwaukee to just north of Madison to the Wisconsin Dells area, producing 2 to around 6 inches of accumulation before changing over to sleet and freezing rain overnight. Ice accumulations were on the order of 1/10 to 2/10 of an inch, but there was an isolated 1/4 inch ice accumulation in south-central Dodge County. Small tree branches broke under the weight of the snow and freezing drizzle, but no power outages were noted. The maximum snow accumulations for each county included 6.3" south of the city of Waukesha, almost 6 inches in far northwestern Sauk County, 5.5" near Port Washington (Ozaukee Co.), 4.4" in Big Bend (Waukesha Co.), 4.2" in Downtown Milwaukee, 4.1" just southeast of Portage (Columbia Co.), 4" in Hartford (Washington Co.), 3.8" in Lake Mills (Jefferson Co.), 3.5" in the southwest part of the city of Madison, 3" in southeast Dodge County, and 2" in east-central Iowa County. Synoptically, warm air advection with a short wave aloft followed by a surface low pressure lifting northward from the southern Plains brought a mix of snow, sleet and freezing rain to southern Wisconsin the afternoon of Wednesday, December 23rd into the morning of Thursday, December 24th. Toward the Illinois border, mostly freezing rain fell that resulted in a low-end ice storm.